

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

SEP 2 7 2013

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Jim A. Liesman Manager The Farmers Grain and Coal Company 409 South Tonica Street Mason City, Illinois 62664

Re: Notice of Violation

The Farmers Grain and Coal Company, Mason City, Illinois

Dear Mr. Liesman:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to The Farmers Grain and Coal Company ("you" or "Farmers Grain") under Section 113(a)(1) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(a)(1). We find that you are violating the Illinois State Implementation Plan related to particulate matter emissions at your facility located in Mason City, Illinois.

We have several enforcement options under Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1). These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV. The conference will give you the opportunity to present information on the specific findings of violation, the efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for Farmers Grain technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Linda H. Rosen. You may call her at 312-886-6810 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak

Director
Air and Radiation Division

Enclosure

cc: Ray Pilapil

Compliance and Systems Management Section Illinois Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	·)
The Ferman Crain and Coal Company) NOTICE OF VIOLATION
The Farmers Grain and Coal Company) NOTICE OF VIOLATION
409 South Tonica Street)
Mason City, Illinois 62664	.)
) EPA-5-13-IL-45
Proceedings Pursuant to)
the Clean Air Act,) .
42 U.S.C. §§ 7401 et seq.)
)

NOTICE OF VIOLATION

The U.S. Environmental Protection Agency is issuing this Notice of Violation under Section 113(a)(1) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(a)(1). EPA finds that The Farmers Grain and Coal Company (Farmers Grain) facility located in Mason City, Illinois (Mason Facility) is in violation of Section 110 of the CAA, 42 U.S.C. § 7410. Specifically, the Mason Facility is in violation of the federally-enforceable Illinois State Implementation Plan (SIP), as follows:

Regulatory Authority

A. Clean Air Act

- 1. Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to adopt and submit to EPA for approval a SIP that provides for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS).
- 2. Section 113(a) of the CAA, 42 U.S.C. § 7413(a)(1), authorizes the Administrator to initiate an enforcement action whenever, among other things, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of an applicable implementation plan.

B. Illinois State Implementation Plan

- 3. On May 31, 1972, EPA approved Illinois Pollution Control Board (IPCB) Rule 103(a)(1) and (b)(1), as part of the federally-enforceable SIP for the State of Illinois. See 37 Fed. Reg. 10842. Illinois has since revised and recodified IPCB Rule 103(a)(1) and (b)(1) at 35 Ill. Admin. Code §§ 201.142 and 201.143, respectively.
- 4. Illinois SIP Rule 103(a)(1) [35 III. Admin. Code § 201.142] provides that "[n]o person shall cause or allow the construction of any new emission source or any new air pollution control equipment, or cause or allow the modification of any existing emission source of air pollution equipment, without first obtaining a construction permit from the [Illinois Environmental

Protection Agency (IEPA)]." Illinois SIP Rule 103(b)(1) [35 Ill. Admin. Code § 201.143] provides that "[n]o person shall cause or allow the operation of any emission source or new air pollution control equipment, for which a construction permit is required . . . , without first obtaining an operating permit from [IEPA]."

- 5. On February 21, 1980, EPA approved IPCB Rule 203(d)(9) as part of the federally-enforceable SIP for the State of Illinois. See 45 Fed. Reg. 11493. Illinois has since revised and recodified IPCB Rule 203 at 35 Ill. Admin. Code §§ 212.461, 212.462, and 212.463.
- 6. Illinois SIP Rule 203(d)(9)(A) [35 Ill. Admin. Code § 212.461(b)] sets forth certain housekeeping practices that all grain-handling and grain-drying operations must implement regardless of size. These include:
 - i. Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.
 - ii. Cleaning and Maintenance.
 - a. Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.
 - b. Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.
 - c. The yard and surrounding area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.

iii. Dump pit.

- a. Aspiration equipment shall be maintained and operated.
- b. Dust control devices shall be maintained and operated.
- iv. Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.
- v. Property. The yard and driveway of any source shall be asphalted, oiled, or equivalently treated to control dust.
- vi. Housekeeping Check List. Housekeeping check lists to be developed by the Agency shall be completed by the manager and maintained on the premises for inspection by Agency personnel.
- 7. Illinois SIP Rule 203(d)(9)(B) [35 III. Admin. Code § 212.462] provides that new and modified grain handling operations (for which construction or modification commenced on or after June 30, 1975), with an annual grain through-put of 300,000 bushels or greater, shall, *inter alia*, apply for construction and operating permits pursuant to Rule 103 [35 III. Adm. Code

- §§ 201.142 and 201.143], and comply with the control equipment requirements of Rule 203(d)(9)(B) [35 III. Admin. Code § 212.462].
- 8. On May 31, 1972, EPA approved IPCB Rule 101 [35 III. Admin. Code § 201.102] as part of the federally-enforceable SIP for the State of Illinois. See 37 Fed. Reg. 10862. Illinois SIP Rule 101 [35 III. Admin. Code § 201.102] defines "modification" as, inter alia, "any physical change in, or change in the method of operations, of an emission source or of air pollution control equipment which increases the amount of any specified air contaminant emitted by such source or equipment or which results in the emission of any specified air contaminant not previously emitted. It shall be presumed that an increase in the use of raw materials, the time of operation or the rate of production will change the amount of any specified air contaminant emitted."
- 9. On September 9, 1994, EPA approved as part of the federally-enforceable SIP for the State of Illinois, Part 211 (A words) [35 Ill. Admin. Code § 211.490], which provides, *inter alia*, that "annual grain through-put" for grain-handling operations "shall be determined by adding grain receipts and shipments for the three previous fiscal years and dividing the total by 6." See 59 Fed. Reg. 46567.
- 10. On September 9, 1994, EPA approved as part of the federally-enforceable SIP for the State of Illinois, Part 211 (M words) [35 Ill. Admin. Code § 211.3570], which defines "major dump pit" as "any dump pit with an annual grain through-put of more than 300,000 bushels, or which receives more than 40% of the annual grain through-put of the grain-handling operation." See 59 Fed. Reg. 46567.
- 11. Illinois SIP Rule 203(d)(9)(B)(ii)(a) [35 Ill. Admin. Code § 212.462(b)(1)] requires certain air pollution control requirements for major dump pits. The rule provides, *inter alia*, that:
 - (a) Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained, at the effective grate surface, sufficient to contain particulate emissions generated in unloading operations.
 - (b) The induced draft air stream for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90% by weight.
- 12. Illinois SIP Rule 203(d)(9)(B)(iii) [35 Ill. Admin. Code § 212.462(c)] requires certain air pollution controls for the internal transferring area. The rule provides, *inter alia*, that:
 - (a) Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.
 - (b) Air contaminants collected from internal transfer operations for grain-handling facilities having a grain throughput of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control

- equipment which has a rated and actual particulate removal efficiency of not less than 90% by weight prior to release into the atmosphere.
- 13. On May 31, 1972, EPA approved Act 9(a) [415 ILCS 5/9(a)] as part of the federally-enforceable SIP for the State of Illinois. See 37 Fed. Reg. 10862.
- 14. Under Act 9(a) of the Illinois SIP [415 ILCS 5/9(a)], no person shall "[c]ause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by the [Illinois Pollution Control] Board."
- 15. On May 29, 2002, EPA approved Act 9(f) [415 ILCS 5/9(f)] as part of the federally-enforceable SIP for the State of Illinois. See 67 Fed. Reg. 37323.
- 16. Act 9(f) of the Illinois SIP [415 ILCS 5/9(f)], as relevant, exempts grain elevators located outside of a major population area from the requirements of Illinois SIP Rule 203(d)(9)(B) [35 Ill. Admin. Code § 212.462], provided that the elevator does not violate the prohibitions in Act 9(a) of the Illinois SIP [415 ILCS 5/9(a)].
- 17. On September 9, 1994, EPA approved as part of the federally-enforceable SIP for the State of Illinois, Part 211 (M words) [35 Ill. Admin. Code § 211.3610], which defines "major population area," to include several counties and municipalities, none of which are Mason City, Illinois.

Permit Background

- 18. On February 20, 2008, IEPA issued to Farmers Grain a Lifetime General Operating Permit for its Mason Facility (Permit #75120129).
- 19. As part of its permit application for the Mason Facility, Famers Grain certified, *inter alia*, that:
 - (a) The Mason Facility is exempt from Illinois SIP Rule 203(d)(9)(B) [35 Ill. Admin. Code § 212.462], pursuant to Act 9(f) of the Illinois SIP [415 ILCS 5/9(f)]; and
 - (b) Farmers Grain will operate the Mason Facility in compliance with, *inter alia*, Illinois SIP Rules 203(f)(1) and 203(d)(9)(A) [Ill. Admin. Code §§ 212.301 and 212.461]; and in compliance with Permit #75120129.
- 20. Condition 2 of Permit #75120129 provides, *inter alia*, that: Farmers Grain must apply for a revised operating permit for the Mason Facility if it "becomes subject to 35 Ill. Adm. Code § 212.462 [Illinois SIP Rule 203(d)(9)(B)] requirements pursuant to Section 9(f) of the Act [Act 9(f) of the Illinois SIP]."
- 21. Condition 4(a) of Permit #75120129 provides that: "[Farmers Grain shall not] cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity that is visible by an observer looking generally toward the zenith

(that is, looking at the sky directly overhead) from a point beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code § 212.301 [Illinois SIP Rule 203(f)(1)]."

- 22. Condition 4(b) of Permit #75120129 provides that: "[Farmers Grain] shall implement and perform the required housekeeping practices identified in 35 Ill. Adm. Code § 212.461(b) through (b)(5) and maintain a housekeeping check list for the grain elevator pursuant to 35 Ill. Adm. Code § 212.461(b)(6)."
- 23. Condition 5(a)(i) of Permit #75120129 provides that: "Grain receiving in all dump pits shall be conducted in accordance with good operating practices to minimize particulate matter emissions."
- 24. Condition 5(a)(ii) of Permit #75120129 provides that: "Each dump pit shall be inspected for proper operation while receiving is occurring, at least once each week . . . when grain is received."
- 25. Condition 5(c)(ii) of Permit #75120129 provides that: "The grain elevator shall be inspected for presence of visible emissions from internal transfer and cleaning, while such activity is occurring, at least once each week when such activity is performed."
- 26. Condition 5(d)(i) of Permit #75120129 provides that: "Grain load-out shall be conducted with socks, sleeves, or equivalent devices, extending to within at least 6 inches below the sides of the receiving vehicle except for topping off."
- 27. Condition 5(d)(ii) of Permit #75120129 provides that: "Grain load-out socks, sleeves and equivalent devices shall be inspected for proper operation while load-out is occurring, at least once each week when grain load-out is performed."
- 28. Condition 8(a) of Permit #75120129 provides that: "[Farmers Grain] shall maintain records of the following items for its grain elevator: (i) records of housekeeping checklists completed by the elevator manager; and (ii) records of the inspections required by Condition 4(b), 5 and 6, with date, time, and observations if such information is not incorporated in the housekeeping checklist."
- 29. Condition 8(b) of Permit #75120129 provides that: "[Farmers Grain] shall maintain monthly records of the following items for the source: (i) Total grain received, bushels/month and bushels/year (running total of 12 months of data); (ii) Grain dried, bushels/month and bushels/year (running total of 12 months of data); . . . (iv) Grain shipped, bushels/month and bushels/year (running total of 12 months data); and (v) PM emissions (tons/month, tons/year) with supporting calculations."

General Factual Background

30. On August 1, 2012 and September 14, 2012, EPA representatives inspected the Mason Facility for compliance with the Clean Air Act, including the federally-enforceable Illinois SIP and Permit #75120129.

- 31. The Mason Facility processes soybeans and com using trucks, two corn dump pits, one bean dump pit, belt conveyors, a dryer, truck load-outs, and storage bins in a manner that creates particulate matter.
- 32. The Mason Facility constitutes a "modified grain handling operation" within the meaning of Illinois SIP Rule 203(d)(9)(B) [35 Ill. Admin. Code § 212.462]. The modifications include: the construction of three storage bins in 1978; construction of a storage bin in 1980; construction of a dump pit in 2000; construction of a dump pit, a dump pit shed, and a conveyor in 2003; construction of two new conveyors in 2004; construction of a storage bin, and load and unload conveyors in 2004; construction of a storage bin and two conveyors in 2006.
- 33. The Mason Facility is not located in a "major population area," as defined in the Illinois SIP at Part 211 (M words) [35 Ill. Admin. Code § 211.3610].
- 34. Based on information Farmers Grain submitted to EPA on August 1, 2012, the Mason Facility's annual grain through-put is approximately 2.48 million bushels per year. The annual corn through-put is approximately 1.9 million bushels, received through Dump Pit #1 and Dump Pit #2. The annual bean through-put is approximately 566,330 bushels, received through Dump Pit #3. Farmers Grain stated that its Mason Facility has approximately 2.26 million bushels of permanent storage capacity.
- 35. Dump Pits: Dump Pit #2 is completely open (not contained within any structure). Dump Pits #1 and #3 had doors that were open at both ends during unloading. None of the dump pits utilized quick-closing doors, air curtains or wind deflectors. None of the dump pits had a suction system that collected air pollutants and treated them with a pollution control device. There were visible emissions to the air while trucks were unloading.
- 36. Internal Transfer Area: Air contaminants from the internal transfer area were not collected and conveyed to air pollution control equipment with particulate matter collection.
- 37. Load-out Areas: Farmers Grain stated that the truck load-outs did not have sleeves that extend six inches into the vehicles.
- 38. Cleaning and Property: Loose grains and dust were scattered on the yard and surrounding area of the property and on exposed flat surfaces; the gravel driveways were dusty; visible emissions were present while trucks were driving on the roadways; and Farmers Grain stated that it did not use water or oil to treat its gravel roadways.
- 39. Numerous homes are located contiguous or adjacent to the Mason Facility.
- 40. Particulate matter from the Mason Facility was deposited on property contiguous to the Facility.
- 41. During and after the August 1 and September 14, 2012 inspection, EPA requested and obtained records from Farmers Grain for the Mason Facility.
- 42. Farmers Grain provided copies of its "Grain Elevator Housekeeping Checklist" for the months of June and July 2012, and August and September 2011, for the Mason Facility.

According to these records, during these months, Farmers Grain inspected the dump pits, dryers, internal transfer areas and load outs on the following dates: July 7, 2012; July 26, 2012; August 25, 2011; and August 19, 2011.

43. Farmers Grain provided its grain throughput records for the Mason Facility. The records showed the yearly amount of grain received and shipped and the yearly particulate matter emissions. The records assumed a percentage of grain dried in a year.

Findings and Violations

- By failing to keep grounds and other exposed flat surfaces clean of grain and dust that would tend to rot or become airborne at the Mason Facility, Farmers Grain is in violation of Illinois SIP Rule 203(d)(9)(A) [35 Ill. Admin. Code § 212.461(b)] and Condition 4(b) of Permit #75120129.
- By failing to asphalt, oil or equivalently treat the yard and driveway to control dust at the Mason Facility, Farmers Grain is in violation of Illinois SIP Rule 203(d)(9)(A) [35 Ill. Admin. Code § 212.461(b)] and Condition 4(b) of Permit #75120129.
- 46. By not inspecting the dump pits, internal transfer, and grain load-out sleeves areas of the Mason Facility once per week or maintaining records associated with such inspections, Farmers Grain is in violation of Conditions 5(a)(ii), 5(c)(ii), 5(d)(ii), and 8(a) of Permit #75120129.
- 47. By failing to maintain monthly records in bushels/month and bushels/year (running total of 12 months of data) of the total grain received, the grain dried, and the grain shipped; and by failing to maintain monthly records of the PM emissions (tons/month, tons/year); for the Mason Facility, Farmers Grain is in violation of Condition 8(b) of Permit #75120129.
- 48. By failing to conduct grain receiving in the Dump Pits #2 and #3 in accordance with good operating practices to minimize particulate matter emissions at the Mason Facility, Farmers Grain is in violation of Condition 5(a)(i) of Permit #75120129.
- 49. By failing to use socks or sleeves or equivalent devices that extend six inches below the sides of vehicles during loading at the Mason Facility, Farmers Grain is in violation Condition 5(d)(i) of Permit #75120129.
- 50. By causing the emission of visible fugitive particulate matter beyond the Mason Facility's property line, Farmers Grain is in violation of Illinois SIP Rule 203(f)(1) [35 Ill. Adm. Code § 212.301] and Condition 4(a) of Permit #75120129.
- By allowing particulate matter to be discharged or emitted into the environment from the Mason Facility, so as to: (i) cause or tend to cause air pollution in Illinois either alone or in combination with contaminants from other sources; or (ii) violate regulations or standards adopted by the Illinois Pollution Control Board, Farmers Grain is in violation of Act 9(a) of the Illinois SIP [415 ILCS 5/9(a)].
- 52. By failing to apply induced draft to its major dump pits that is collected and conveyed through air pollution control equipment which has an overall rated and actual particulate

collection efficiency of not less than 90% by weight at the Mason Facility, Farmers Grain is in violation of Illinois SIP Rule 203(d)(9)(B)(ii)(a) [35 III. Admin. Code § 212.462(b)].

- By failing to collect and convey the contaminants from the internal transferring area of the Mason Facility through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90% by weight, Farmers Grain is in violation of Rule 203(d)(9)(B)(iii) of the Illinois SIP [35 III. Admin. Code § 212.462(c)].
- 54. Violations of the Illinois SIP constitute violations of the CAA.

Environmental Impact of Violations

55. Violation of the pollution control requirements for grain elevators in the Illinois SIP increases public exposure to unhealthy particulate matter. Acute respiratory effects of the inhalation of particulate matter include narrowing of the airways and asthma attacks. Chronic respiratory effects include damage to lung tissue, increased pulmonary resistance, and fibrotic changes in lung tissue. Increased pulmonary resistance and fibrosis may lead to cardiovascular impairment.

9/27/13	1.70
Date	George P. Czerniak Director Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice of Violation, No. EPA-5-13-IL-45, by Certified Mail, Return Receipt Requested, to:

Mr. Jim Leisman Manager Farmers Grain and Coal Co. 409 South Tonica Street Mason City, Illinois 62664

I also certify that I sent copies of the Notice of Violation by first-class mail to:

Ray Pilapil, Manager Bureau of Air Compliance and Enforcement Section Illinois Environmental Protection Agency 1201 Grand Avenue East Springfield, Illinois 62702

On the 27 day of September 2013

Loretta Shaffer

Administrative Program Assistant

AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER:

7009 1680 0000 7669 5794